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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/636,571	08/10/2000	Kazuhiko Nakamura	D01-4120/TK	6450

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EXAMINER

ROBERTSON, JEFFREY

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/636,571	<b>Applicant(s)</b> NAKAMURA ET AL.	
	<b>Examiner</b> Jeffrey B. Robertson	<b>Art Unit</b> 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 55,57-78,80-85,87-90,92-94,99,100 and 102-148 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 66-78,80-85,87-90,99,102-115 and 125-148 is/are allowed.
- 6) ☒ Claim(s) 55 and 57-65 is/are rejected.
- 7) ☒ Claim(s) 92-94,100 and 116-124 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 100 is objected to because of the following informalities: in claim 100, the spacing of the words in line 7 needs to be corrected.

### ***Double Patenting***

2. Claims 92-94 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 88-90. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 55 and 57-65 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Scheve (4717643).

The reference teaches a hardenable resin composition comprising a polymer prepared from acrylate monomers including acrylic acid and a hydroxy acrylate that is reacted with isocyanatoethyl methacrylate in the presence of triphenyl phosphite stabilizer and further reacted with hydroxylpropyl methacrylate. See examples 1 and 3-5. The hydroxylpropyl methacrylate inherently reacts with any acid anhydride side product to produce an ester bond. Further, the claimed product, containing alcohol ester

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bonded to part of the acidic functional group, does not distinguish over the products of the reference containing copolymerized methacrylates.

***Response to Arguments***

5. Applicant's arguments filed 6/30/05 have been fully considered but they are not persuasive. Applicant argues that Scheve does not disclose the process set forth in the present claims. Applicant argues that Scheve uses the isocyanate compound in excess. Applicant also argues that since the HMPA used in the Scheve is mainly consumed in order to remove the residual IEA, the acid anhydride groups on the principal chain on the polymer is not decomposed or the decomposition is not efficient. Applicant argues that the polymer disclosed in Scheve therefore contains a higher amount of acid anhydride groups and is therefore inferior in stability.

In response the examiner's position is that the polymers claimed contain no indication of the amounts used to produce the polymer or a content of anhydride groups present. As to the stability of the polymer, since there is no measurement of stability that appears in the claim, and therefore even though the reaction of HMPA with the acid anhydride groups on the polymer might not be efficient, it would result in a polymer that is more stable than a polymer that did not have the benefit of this treatment. In view of the foregoing, applicant's arguments are not persuasive and the rejection set forth above has been continued. Regarding the arguments presented on pages 40-42 of the response, these arguments in light of new claims 132-148 are sufficient to render these claims allowable.

***Allowable Subject Matter***

6. Claims 66-78, 80-85, 87-90, 99, 102-115, and 125-148 are allowed.
7. Claims 100 and 116-124 would be allowable if rewritten to overcome the claim objection set forth above.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey B. Robertson  
Primary Examiner  
Art Unit 1712

JBR